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Engineering  
Environmental  
Coatings and Resins Group

October 26, 1993

Mr. Don Graham  
On-Scene Coordinator  
USEPA Remedial Action Branch  
Edison, NJ 08837

Re: Walton's Farm Site Access Road and Support Area Stone

Dear Don:

I recently became aware of information which I believe has a direct bearing on the stone situation at the Walton's Farm site. This information is a draft report prepared by the New Jersey Department of Environmental Protection and Energy entitled "A Summary of Selected Soil Constituents and Contaminants at Background Locations in New Jersey". I do not have a complete copy of the draft report, but have attached a copy of the title page and a copy of Table 11 "Summary Statistics for Chlorinated Pesticides". Ranges of background detected values for DDT, DDD, and DDE are included in this table. Of these compounds, DDD has the lowest reported range of 4-490  $\mu\text{g/kg}$ . Reported ranges for DDT and DDE exceed 1000  $\mu\text{g/kg}$  as their upper bound. As you recall, testing of the stone at the Walton's Farm site revealed a maximum concentration of about 300  $\mu\text{g/kg}$  for DDT and metabolites combined. A second sample of the stone resulted in a combined DDT and metabolite concentration of 5  $\mu\text{g/kg}$ . Comparison of these values to the attached Table 11 clearly demonstrates that they are well within background ranges established for the State of New Jersey. Hopefully this information should assist you in your determination regarding the final disposition of this stone.

Should you have any questions concerning this information or if you would care to discuss this issue further, do not hesitate to contact me.

M. E. Terrell, P.E.

Mgr., Site Remediation

/m

cc: Mr. P. Hicks J. Karas File/ WF-603.1

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*file: Mattl* " *soil* *background*  
*levels*"  
NJDEP

# A SUMMARY OF SELECTED SOIL CONSTITUENTS AND CONTAMINANTS AT BACKGROUND LOCATIONS IN NEW JERSEY

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*DRAFT*  
*REPORT*  
*EXCERPTS*

trend of increasing concentrations from rural to urban land is seen, however, certain compounds do display an apparent variation with land use.

Due to the low detection frequency, possible associations between occurrence and land use categories were not formally tested. However, certain trends in occurrence were observed. Fifty-one percent of the samples contained detectable levels of the chlorinated pesticides. Frequency of pesticide detection apparently varies by land use category. An average of 3.9 pesticides were observed in the urban land use category, which was higher than 2.7 in the suburban or 2.1 in the rural land use categories. Not surprisingly, the occurrence of pesticides in the samples increases substantially on lands where applications of pesticides would be anticipated. The five golf course soil samples had a total of 41 pesticide occurrences resulting in an average of 8.2 pesticides per sample.

**Table 11 Summary Statistics for Chlorinated Pesticides**

Pesticides	MDL ug/kg	Number Detected	Range of Detected Values ug/kg	Geometric Mean ug/kg	Arithmetic Mean ug/kg
alpha-BHC	4	2	4 - 9	2.1	0.16
gamma-BHC	1	3	2 - 4	0.5	0.13
beta-BHC	1	29	3 - 713	3.0	27.8
Heptachlor	1	4	5 - 15	0.6	0.4
Aldrin	1	1	17	0.5	--
Heptachlor Epoxide	1	11	2 - 780	0.9	16.1
alpha-Endosulfan	1	9	2 - 80	0.7	1.7
beta-Endosulfan	3	0	--	--	--
p,p'-DDE	2	28	2 - 1770	4.2	65.8
Dieldrin	2	13	2 - 1237	1.9	33.3
Endrin	3	2	229 - 260	1.7	6.1
o,p'-DDT	4	13	10 - 2632	3.8	63.2
p,p'-DDD	4	14	4 - 490	3.6	22.7
p,p'-DDT	5	18	5 - 4610	5.4	78.9
Endosulfan Sulfate	33	1	2108	17.5	--
Chlordane	2	7	13 - 10560	1.6	223
Mirex	2	1	8	1.0	--
Methoxychlor	6	0	--	--	--
Toxaphene	nd	0	--	--	--

MDL = Minimum Detection Limit

nd = MDL was not determined by laboratory for this compound

<sup>1</sup> Sample total = 80

Beta-BHC and p,p'-DDE were detected in the largest number of samples, 36% and 35%, respectively. Alpha and beta BHC, heptachlor, p,p'-DDE, o,p'-DDT, p,p'-DDD and p,p'-DDT tended to occur more frequently in the urban and golf green land use categories than the suburban,